Electromagnetically Attaching Submarine Drones for Surface Ship Hijacking

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Introduction

Arranging for accidents to happen to ships at sea and in home-port can be useful in a variety of situations, for instance, when there is a desire to sabotage a first-in-class vessel or perhaps to attrite the overall naval capacity of an adversary in a deniable way prior to the outset of an overt conflict.

Ordinarily, the last thing in the world a submarine operator would want is a magnetized hull as this can give away the presence of a submarine. However, there is one special case in which the introduction of magnetism of sorts to a module attached to the upper hull of a submarine could be desirable.

In the popular novel and film, The Hunt for Red October, a Russian defector furnishes the CIA with a first-in-class stealthy Russian ballistic missile submarine with the cooperation of the officers aboard his ship. In the real world, such a scenario is extremely unlikely to play out. There have been isolated cases in which individual fighter pilots have defected, but typically not with the most modern generation of fighters.

While the price of fighter jets is now measured in the hundreds of millions of dollars, naval platforms such as destroyers are now priced in the multiple billions of dollars. The sensitive, modern equipment aboard these ships would be extremely valuable in enemy hands. If there were a way to obtain a whole, intact ship (preferably a very modern one,) it would be an intelligence boon to the capturing military.

Abstract

Even as there is now a trend toward the miniaturization of submarines and drone submarines, a submarine of substantial size and of special design could be used for the application of the physical hijacking of a naval platform. While drones have been historically hijacked using powerful radio signals which drown out legitimate signals, naval platforms which are ultimately controlled by humans are not vulnerable in this manner. While it wouldn't be practical to hijack a naval destroyer by boarding it, there may be an alternative means of hijacking a naval destroyer.

A specialized submarine, perhaps a drone, could be fitted with electromagnets which enable it to attach to the ventral side of a ship from beneath. Provided that the submarine could "sneak up on" the destroyer, which is entirely plausible, it could lock onto the ship and flood its ballast tanks in order to physically pull a surface ship down below the water line. The surface ship could then be dragged through the ocean back to the friendly waters of the hijacking nation where it could be analyzed and its advanced technology harvested.

Conclusion

Perhaps the chief engineering challenge involved in such an endeavor would be to build a submarine with sufficient ballast capacity to pull a ship with substantial buoyancy beneath the water line. As such a maneuver has never before been tried, it would be likely to take an adversary by surprise.